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ADDRESS,

INTRODUCTORY TO

A COURSE OF LECTURES,

DELIVERED IN THE HALL OF THE

MEDICAL COLLEGE OF SOUTH CAROLINA,

BEFORE THE

TRUSTEES AND FACULTY, THE STUDENTS OF MEDICINE,
AND THE PUBLIC GENERALLY,

AT

THE OPENING OF THE SESSION OF 1833-4.

BY

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"Res non verba."

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THIS ADDRESS
IS RESPECTFULLY DEDICATED

TO

BENJAMIN BONNEAU SIMONS, M. D.

THE

DISTINGUISHED SURGEON

OF

SOUTH-CAROLINA,

By his friend,

THE AUTHOR.

PREFACE.

This Address has been published, as explanatory of a course of Lectures, which the Author is now delivering in the Medical College of South-Carolina.

It is not pretended that the views which it contains are original—on the contrary, the Author takes pleasure in acknowledging his obligation to Cloquet, Meckel, Blandin, Velpeau, Quain and others, of whose works he has availed himself, and who have given a new form to Anatomical pursuits. Instead of making it an abstract Science, they have considered it as an enquiry altogether adapted to practical purposes. Quain justly observes, that “Human Anatomy cannot be considered as an abstract Science: scarcely any one enters on its study, unless with a view to make practical application of the facts it discloses, in the treatment of disease.”

With this intention, this Address is submitted to the Medical public, in the confident hope, that it will not fail to convince them—that the method which the Author has adopted, can be made available to the Student, and highly beneficial, even to the experienced practitioner.

ADDRESS.

GENTLEMEN—

THE study of the structure of organised beings, is the most profound of all human researches. Interesting as are the investigations of inorganic aggregates formed under the influence of attraction, curious as are the laws which operate for their preservation, and however satisfactory to the mind to perceive and appreciate their formations, they all yield in importance to the contemplation of objects which possess that principle, we denominate life. Life is only known by its effects—what it is, we cannot tell, and the discovery of its nature will continue, as it hath hitherto done, to baffle the ingenuity of Philosophers. No one has rent the veil, behind which nature performs this mystery.

[To trace organised beings from their simple state to their most complex conditions, and to observe the gradations of the scale, can alone make us feel the infinite perfection that has been bestowed upon our own frame—and to have a competent knowledge of this, we are obliged to refer to the several classes below us, for the solution of difficulties too often encountered. In this investigation, three Sciences are employed, Natural History, Physiology, and Anatomy, all of which have numerous points of contact. Yet the foundation of the two first, is Anatomy.] In our profession, it is undoubtedly the basis. A Physician must understand an organ in its natural condition—he must observe the laws which govern its action, and the sym-

pathies it diffuses—he must view it in its anormal state, and look to the modification of those laws by disease, more especially in the alteration of structure which it induces. Anatomy is indispensable to the Surgeon in the successful prosecution of his department, and so well should he know the human body, that before he commences an operation, it should be transparent to him, that his eye may precede his scalpel.*

[To pursue the study of Anatomy advantageously, it should be considered under three aspects, 1st, Special, or Descriptive Anatomy. This describes every organ, its form, and the arrangement of its elementary tissues. 2d, General Anatomy. This treats of tissues abstractedly of the organs which they form. 3d, Topographical Anatomy. This has been denominated Surgical Anatomy, and Anatomy of relation. The former refers merely in its importance to the Surgeon—the latter to the relative position of parts. It is evident that these objects would be too exclusive. But to treat of the body in masses, the elements which compose it, the relation of particular organs with each other, their developments in health and disease, and to observe the different layers of texture from the external to the internal parts of the system, constitutes Topographical Anatomy in its strictest sense. I propose in this lecture to consider some of the methods of pursuing the study of Anatomy, then to point out the course I shall adopt in its application to Medicine and Surgery.]

[It is very evident that the time allotted in our Colleges, is entirely inadequate to place before the Student a full view of this important subject, and when Physiology is connected with it, it must be too limited for his permanent advantage. The prevailing method in most of our Universities, and in the Schools of England, is to point out the simple organ—as for exam-

ple, the form and shape of a bone, its elevations and depressions, with some attachments of muscles; the name of the muscle, its origin, insertion, and function; the arteries, with their branches, &c. It is very apparent, that we have here a series of abstractions, with no practical value attached to them, and if they be remembered, it is not with any reference to their application to the different departments of Medical Science. The French and German Anatomists, have felt the defects of this system, and have connected with it the Anatomy of Relation, the same in fact that was taught by Winslow, upwards of one hundred years ago. In the recent work of Bransby Cooper, an attempt is made to obviate some of the difficulties which have impaired the value of this branch of Medicine. It is unnecessary to dwell upon this method, its imperfections are too glaring to demand refutation. It has performed one remarkable feat, that of satisfying the Physician that Anatomy forms no part of his study.]

[The late lamented Godman taught another method, called the Analytic, which is best explained in his own words: "The subject is placed before the learner untouched—the knife is not used to clear obstructions from the way of the Teacher, previous to the lecture. The student sees the relation of parts—the Anatomy as it is left by the hand of nature—he observes the manner in which they are successively removed—he sees the situation and company in which they are always to be found, and perceives that in this mode of examination, there are no difficulties to impede his progress, but inattention and neglect. The body is decomposed by the knife in his sight." This was unquestionably an improvement, yet it has too many defects, and is too complicated for a beginner. Too many things are crowded upon the student, and he is

confused and often fatigued with the great variety that is presented to him.] It has, however, the merit of relation, which is a great recommendation—yet it cannot be concealed, that if the Lecturer be not a most expert Anatomist and Dissector, there will be a great waste of time. It is better adapted to the Dissecting Room, than the Anatomical Theatre. I cannot omit this opportunity of bearing testimony to the distinguished merit of this great Anatomist. His life presented a series of difficulties, which a most aspiring mind and persevering industry endeavored in vain to overcome. Born to no fortune, and without education, he qualified himself for the arduous duty of a Lecturer on Anatomy, and although disappointment met him in every attempt he made to distinguish himself, he urged onward. Although pressed to the earth by a disease, that promises every thing, only to deceive more certainly, still he did not weary, but struggled to the last. Death found him with his pen in his hand, illustrating some important department of the Science, which he had made peculiarly his own. The genius of such a mind provoked rivalry, and he felt the persecution of private interest, and many who now gather around his tomb, to render him the homage due to a cultivated mind and extraordinary talent, refused the timely aid, that might have rescued from the grave the unhappy victim of poverty, disease, and neglect. He is now beyond the reach of censure or praise. He will be judged by the impartial Historian, and his name will be inscribed upon a tablet more durable than monuments of marble, or statues of brass. The marble may crumble, and the brass may dissolve, but his fame will be ever green and unfading, untouched by the power of time.

Anatomy is also taught with exclusive reference to Surgery. This cannot be recommended as a prepar-

atory study, as it cannot at first be made available to the student.

I shall endeavor to simplify the study, by first considering the bones ligaments and muscles, separately, making them the ground work of all the other systems of the body, and I will afterwards combine them all in such determinate limits, that they may be arranged for practical purposes.

In doing this, it will be my endeavor to be minute upon every tissue—for looseness and neglect in its details, must lessen the study in value—There is nothing in the structure of man too unimportant to excite our interest. Students are too apt to be disgusted with minute Anatomy, because it has no reference to Surgical operations, and has no other merit than mere minuteness, which the Lecturer gives as a display of his own power, without any reference to the benefit of his hearers. But it is in minute Anatomy, that the philosophy of our profession is found, and it is in minute Anatomy, that we are to be protected from the dangerous path of scepticism. Now, if the Lecturer brings with him these requisitions, what can be found more animating, and what more useful? It has often been charged against our profession, that infidelity has more disciples than can be numbered in other vocations. If this be so, which I am not prepared to admit, can there be any doubt that it has its impulse in the entire neglect of a constant reference to design in our structure? Can the contemplation of matter excite disbelief more than metaphysical disquisitions? Certainly not—it is familiarity alone that performs this office, in which it is assisted by a neglect of animal mechanism in our Colleges. As soon as a student is convinced that every part has its appropriate use, he will, says Dugald Stewart, “feel himself dissatisfied until he discovers some at least of the purposes to

which it is subservient." Every department of Natural Science has treatises upon its philosophy, and shall our structure escape that notice to which it is so eminently entitled? We behold the sun in the heavens diffusing light and warmth to every part of creation—yet it excites neither wonder, nor devotion—but if we believed that this great body would pursue his tract only once during our lives, the hills would be crowded, and the vallies filled, to see this prodigy of terror and divine power. It is familiarity then that destroys this deep feeling of reverence—and ignorance, that makes a miracle, of a common occurrence. It is not Anatomy that causes infidelity, for what work of creation can compare with man, and what can demand greater homage than the image of the Creator himself! Was it the inspection of matter that made sceptics of Voltaire, Hume, and Gibbon? They soared in the lofty regions of intellectual enquiry—spirit to them was a companion which led them to doubt almost the existence of a first cause. The charge is then unjust. No subject possesses greater capabilities, and if it is not extended to all its power of expansion, the fault is not with the Science. Death appears to sanctify the body, and profane are the hands which desecrate the grave, as if mind could live in dust, and sensibility exert its power when life had fled.

The osseous system always fatigues the student, because it is not given in connection with the muscles and ligaments. These organs of passive loco-motion, have been most studiously neglected, and without a perfect knowledge of the different levers they form by muscular attachment, how can we understand the philosophy of dislocation and fractures? In the usual demonstrations, their depressions and prominences are spoken of more with a reference to mere form, than to the practical impor-

tance they possess. Has it never occurred, that a depression has been mistaken for a fracture, and the trephine been used, or a prominence for a dislocation, and attempts at reduction been employed? Is it then of no consequence that their relations should be investigated? Ask the Surgeon, who first amputated the jaw, and he will tell you, that its relations were to him a *terra incognita*, and he who dared to extirpate the clavicle, that it was an operation of terror—and have not the muscles met the same neglect, and created the same distaste? The only merit appears to consist in making a clean muscle, a shining tendon, and a glistening fascia. What profit is it to the student, that he is informed that the Biceps Flexor Cubiti, arises from the coracoid process of the Scapula and its glenoid cavity, and is inserted into the tubercle of the radius, and that it raises the fore arm. Has it no relation to artery, vein, and nerve? Is there not practical importance in almost every fibre? Has it no associate actions? Does not its external form differ in its physiological action, from its anormal condition produced by dislocation? Suppose, for example, that a young practitioner is called to dislocation of the arm downwards in the axilla—and he bring to his aid all the information that his manual of Surgery can furnish him—what can teach him the proper method of reduction, except it be found in a perfect knowledge of the lever, which the bone assumes by the accident. But when he is informed, that the pectoralis major, the latissimus dorsi, and teres major by their contractions, fix the elbow to the ground, that the head of the humerus is the moveable point on which they act, and that consequently, the humerus becomes a lever of the third kind, the elbow being the fulcrum, the scapulo humeral articulation, the resistance, and

the muscles the moving powers—with a knowledge of these facts, he must act with certainty, and consequently with greater safety to the patient. Here then is the proof, that the bones, ligaments, and muscles, must be studied in connection, and when once they are made the basis, all other parts of Anatomy are unfolded—the whole study is simplified, and made easy and pleasant.

The fasciæ are most important, and it is absolutely indispensable that the Surgeon be acquainted with all their different deployments, and the same may be said of the varieties of the arteries. Yet the first is almost a study of curiosity, and the last is considered such a rare occurrence, that no apology is required for its omission. Having properly studied these various systems, the learner is prepared for the combination so important to practical objects.

I am aware, that the introduction of a new method is always received with distrust. The conflicting interests which it creates, and the discredit which it naturally throws around established systems, are sufficient to subdue the most active enterprize, retard the well digested plans of talent, or the inventive power of genius. Improvements in the arts are not slow in their progress, because they involve facts of a practical character, and carry the stamp of their power in the utility they propose. In approaching abstract sciences, where sophistry is mistaken for wisdom, and speculation for proof, we cannot wonder at the caution a new plan of study induces. In the old and prejudiced mind, there is always found most opposition, for here is the seat of dictatorial authority, which must fall if any equality is acknowledged. The discoveries of Harvey were familiar to every one, and although they rested upon facts susceptible of demonstration, yet the influence of prejudice would not admit the light so clear-

ly revealed by his labors. Such however, is the progress of Science in our day, that philosophers often live to see themselves placed in the position of posterity, and their works become a part of the history of another age. Science must assume a new form, and adapt itself to the spirit of the age, and Medical enquiry must fix its basis, upon the same principles that govern other departments of human knowledge. To record facts and compare them, that sound opinions may be deduced, is the only safe method of building up a Science, and of giving it form and consistency. The French Philosophers endeavored to impress these laws upon Anatomy, for before the inductive system was adopted, however arduous the labors of their predecessors might have been, but little addition was made to the stock of knowledge, in their day. The discoveries of Pinel and Bichat, were supposed to have left nothing to be desired, and it was thought that their genius had disclosed the long concealed treasures of the healing art—that general Anatomy now being understood, Medicine would no longer be subject to the same vacillating changes. Yet this was but an approach to the able investigations of their distinguished successors. Tiedeman, Gmelin, Bell, and others rose up, to add to the constellation that was about to appear in the Medical horizon. And what has been the result of their labors? It has disclosed the important discovery, that an organ is not confined to a viscus, but that it embraces limits established by nature—or in other words, that Topographical Anatomy,* is that grouping constituted by nature, sometimes in a physiological state, and at other times in a combined order, without destroying the action of either. We are indebted to the French Anatomists for these important arrangements, and although England has not been inattentive to their value, still

* Blandon.

Her contributions were never given in a determined form. It is to France, where labor is minutely divided, that we are to look for the perfection of a Science. It cannot be a cause of astonishment, that there should be a compactness, as well as a completeness, in all branches of knowledge to which they turn their rigid scrutiny. Blandon, Valpeau, and Edwards, have already sent forth treatises in relation to Surgery and Medicine. Anatomy is also enriching itself by the enquiries of Bourdon and others.

Topographical Anatomy is the science of local organization. Anatomy, in our country, has been taught with reference to Physiology and Surgery, but our subject expresses more, and includes Medicine in its investigation. To effect all these objects, the body is divided into different parts, or regions. It must not be supposed, that arbitrary limits, to suit the convenience of the Anatomist, are here laid down. Far from it. Nature has prescribed boundaries which are determinate. We see this in the different dispositions of the body. Here external Anatomy shews osseous elevations, and there muscular depressions, and if we examine the human frame, we shall discover the different points from which these divisions emanate. Nature absolutely points out the grouping of different portions of the body, physiologically constituted. Are not the limbs, the organs of locomotion? The Thoracic walls, the protecting organs of the Thoracic Viscera? Is not the hand, that of touch? Are there not great analogies between special organs and regions? Does not the skin vary in every part of the body, conforming its powers to the organs it covers? We study the liver, stomach, lungs, and heart, as separate organs, and not in the distinct tissues which form them? Combined, they perform a simple or a compound function, and so do other parts of the body. It will be

admitted, that the brain possesses functions which may be called organic—for example, the Cerebrum is the seat of motion, the Cerebellum that of sensation, and the spinal cord possesses not only these combined powers, but respiratory movements likewise. Is there any absurdity then, in denominating any part of the body, which is governed by laws peculiarly its own—an organ, and is it not proper that it should be investigated with reference to its own distinctive powers? We know that life is not extinct simultaneously, when death is said to take place. The nails and the hair grow, and secretions are continued, which prove the separate existences, as well as the independent actions, of different systems. Bodily movements in cholera are familiar to all—peristaltic actions are continued, and the chyle has been seen traversing their ducts—the heart has ceased to beat, whilst the brain retained its power, and the brain has died, when the heart has continued to pulsate. There is then every reason to study the body in the limits which nature has pointed out, and it will be acknowledged, that the sum of our knowledge must be made up from the different systems which are embraced in its action. The body is a unit, it is true, but its integral parts are varied and diversified.

Most regions are moulded upon the Skeleton. Some are long, as those on the limbs—some flat, and tend to form the walls of great cavities—others are short and thick. They should be first studied in relation to their exterior form. There is perhaps no part of Anatomy which is more essential, than a perfect knowledge of the form of the body. This is the exclusive property of the painter and sculptor, as if Anatomy held its domain in the internal structures. The Surgeon often encounters great difficulty in determining the character of dislocations, from an ignorance of

this subject. Indeed, they have sometimes been confounded with ununited fractures, and diseases of the bones. To the Physician, a knowledge of this part of Anatomy is indispensable, for when he considers the proximity of the abdominal viscera, he should be ready to detect the least variation. Take, for example, the pylorus, the upper portion of the duodenum, the head of the pancreas, and the thin edge of the liver, or the ascending arch of the colon, the kidneys, and the inferior part of the liver, all of which can be covered by the hand—upon what is he to rely, except it be on outward examination? I mean to be understood in the beginning of the disease, for after some time the sympathies are so involved, that diagnosis is impossible.

Every region should be studied in relation to its depth, its direction, dimensions, structure, development, varieties, and its uses. This is the only method by which we can obtain a knowledge of healthy function, diseased action, operations, and give operative medicine the true interpretation by Anatomy. The exposition of the structure of a region, involves two things—1st, the elements which compose it—and 2d, the relations of those elements. In enumerating the elements, we should have a constant reference to the base, and also, to its boundaries. If the base be osseous, muscular action is concerned—if muscular, arteries, veins or nerves pass through it, or form anastomoses. Anastomoses of the blood vessels are very important, and are best studied in separate limits—as they spring from separate trunks, they consequently establish peculiar actions, and create different sympathies. They also sustain the circulation, when large vessels are tied or obliterated. The relation of tissues constitutes a most important part of Topographical Anatomy. It is a happy provision of nature, that every

texture is insulated by coverings, which vary much from the organs which they envelope. At one time, it is cellular membrane, at another it is fascia, each of which presents the same ultimate molecules, yet they are diversified by the different uses which they are destined to perform.

Every region presents a perfect state—the description of one, is the type of the other—modified only by the varieties of the different periods of life. The inferior maxillary bone, and spine, differ in the child, adult, and edentulous subject—the larynx and pelvis only at two periods. Is it not necessary that they should be understood in all these changes? Does it not give great precision to our knowledge?

Lastly, every region is destined for some evident use—such are the limbs for motion. Some are passive, while others are free, and this constitutes them perfect organs, for they have their peculiar properties or vitalities, their own laws, and their own functions.

Such, then, is the brief outline of the course I intend to lay before you. Its merit lies in its practical application to Medicine and Surgery, which I now proceed to give you

It is an error of but too common prevalence, to suppose, that a knowledge of Anatomy is not absolutely necessary to the Physician. If we examine the history of Medicine, we are surprised at its vacillating condition. Observation has been the foundation of all theories—this being fallible in itself, must be productive of results equally uncertain. Shall I remind you of Hippocrates, who resolved every thing into one grand principle—nature? Of the corpuscular theory of Asclepiades? Of the heroic remedies of Eristratius? Are they more absurd than the distempered fancies of Brown, the debility of Cullen, or the unity of disease of our countryman Rush? Every hali cen-

tury revolutionizes the opinions of Physicians—our times are not less characterized by contradictory theories, than the centuries that are past. We are constantly complaining of the Protean form of the same disease—we are often confused in our reference to a nomenclature, and are more frequently at a loss to reconcile apparently contradictory statements. Is the Medical world agreed upon the doctrine of fever? Clutterbuck will point to the brain as its seat—Cullen to spasm—Fordyce to the system at large—Broussais to the mucous membranes—whilst others prescribe entirely for symptoms. Nor is the contest less severe in our own country. By some, yellow fever is thought to be imported and contagious—whilst others, stoutly deny that it originates in any place, except where it appears. Have not Medical men been thrown into confusion by the recent epidemic which has scourged our land? Now why is this? The solution of this problem, is found in the utter neglect of the application of the principles of sound philosophy, to the healing art, by which alone it is elevated above the assaults of quackery. The sources from which we are to obtain our information, consist in observations upon the living, and in the examination of dead bodies. I admit that our materials are scanty, but our deductions are based on facts, which cannot err. Yet it must be understood, that we are not to rely upon facts alone—we must receive probabilities and speculations, taking care to separate these grades of evidence. If the inductive system were strictly followed, our Journals would not teem with wonders and anomalies in disease, nor our Societies be astounded by miracles. But while every man assumes the right (and it appears entirely legitimate that he should do so) of forming his own system—we must continue to grope in the same darkness—to be exposed to the

same ridicule, and satirized with the same unsparing rigor. No profession possesses so many extrinsic aids as ours. The Botanist has explored every region, the Chemist analyzed every compound, and the Physiologist established the function of almost every organ, and what standards have all these produced?

It has been urged, that Medicine does not admit of the same rigorous deductions as other Sciences. Never was a charge more unjust. It has been but partially studied, but whenever the attempt has been fairly made, it has admitted of the same philosophy. In its present condition, if light breaks in upon it, it is only to discover the ruins of a temple, whose parts are complete, and which requires nothing but diligence, to raise it in the same harmony, beauty and order, which dignifies other arts.

Every profession is insulated, save ours, which is the common property of every class of the community. There is an admitted interference, which we are compelled to recognize, and consequently a right to discuss its merits, which we cannot dispute. When its principles are established upon a sure basis, we shall be beyond the reach of these difficulties. Until that period arrives, we cannot boast of the attainment of any thing more than legalized empiricism.

It is very evident that there must be a change—and from whence are we to deduce our rules, but from a perfect knowledge of structure. Pinel was the first who directed the attention of the profession to this enquiry, and Bichat has done more to perfect our knowledge, than all the hypotheses that have ever appeared. Who can contemplate the works of this great man, without admiration and gratitude? Had he lived to the usual period allotted to human existence, death would have often been robbed of his prey. But at an age when reputation and distinction can

scarcely be anticipated, he fell a victim to his ardor and zeal. The Medical horizon is still glowing with his descent—the light which falls upon his tomb, will enable posterity there to trace the value of his labors, in the record of his merits which gratitude has inscribed upon it. Every system fell before his researches—he was in advance of his day, and so complete was his work, that his successors have done little more than to embellish it. Disembarrassed by theories, he advanced boldly to investigate the different structures of the body. These he examined through all their modifications, their actions, their vital forces, and their susceptibilities. He classified the different tissues, and although they have been modified, the general laws which he discovered, are still maintained. Whatever respect we may entertain for Hippocrates, or Sydenham, their merits are rendered insignificant by the power of Bichat, whose works will live, so long as Medicine is pursued upon fixed principles—whilst those of the former will be referred to, merely as the curiosities of literature.

Anatomy, then, is the basis upon which our superstructure must rest, if we expect it to maintain a proper rank and station. What power would philosophers possess, if they were ignorant of the laws of the Science they teach? Would the simple contemplation of the heavens, make an Astronomer? And will a mere observer, make a Physician? He may discourse upon nature, its powers, and its value—but is nature always true and unvarying? By what then is he to test his principles, except an accurate knowledge of Anatomy? He may bring the ancients to his aid, as controversialists cite the opinions of the Fathers—but in what is their testimony better than his own experience? He must call upon the dead—their voices tell him, “that it is to the body alone he must

look for his axioms. This is the book, in which the revelations of the Science are to be found—a book not filled with human speculation or theory—but containing a code indestructible in its character, and true in its exposition. This is the crucible, in which the Medical Alchymy of ancient and modern dreamers, is refined and freed from dross. It bows to no idol, and sacrifices to no deity. It is the very altar itself, upon which burns the incense of truth, whose fragrance cannot be destroyed, nor its vestal flame extinguished. The light of hypotheses only flash upon us, to make darkness more visible—but this will be the pillar of fire, to guide us through the sea of false philosophy which threatens to overwhelm us.

If so many benefits have accrued from Pathological enquiries, how much must they be increased by an adherence to the principles which they have evolved? How many deceptions have been ignorantly practised, from an inadequate investigation of disease—and what value can be attached to its history, when a Physician is incompetent to describe it? How can he be a competent judge of diseased structure, when he is ignorant of its healthy condition? How many diseased appearances, which never affected vital action, have been proclaimed the termination of some malady? And how can such error be corrected, unless we examine distinct portions of the body, which possess independent properties, although subject to general laws and influences? How often does it happen, that these laws and influences are not disturbed, and yet death appears suddenly and mysteriously. Is not the neglect of Anatomy, one of the causes which creates distrust in the public mind, when epidemics appear? And does not the public always range itself on the side of empiricism? [For, if laymen discover that Physicians depend upon observation alone—their common sense

is considered as valuable, as our opinions.] And yet, will any man assert that common sense is applicable to our profession. Every man is a judge of a moral sentiment, or a religious opinion—he can distinguish sophistry from truth—for he is endowed with the ability of comparing such facts as are presented to his view, and the elements of discussing their pretensions. But when he approaches Medical enquiries, he is entirely ignorant of first principles. What can he understand of an organ—its healthy or diseased structure, its function, the sympathies it diffuses, or the vital properties which it possesses? The foundation is too deep, and beyond a vision, which embraces only objects that are palpable to the senses, or become familiar by frequent inspection. But is he to be censured for opinions, which derive their support from popular treatises? Certainly not. The fault lies with us, in placing before him a subject stripped of its science, to render it intelligible to his capacity—a subject that never contradicts his reason, but transcends his power of comprehension, from the scanty materials presented to his view, or placed at his disposal.

It is then necessary that Anatomy should form the basis of Medicine, because it makes us more accurate in the detail of facts, and protects us from the interference of the presumptuous. Make the public understand, that Anatomy is the groundwork of Medicine, and we shall have but little cause to complain, that there is no dignity in our calling—but whilst bubbles of hypotheses are afloat in the atmosphere—every theory has the same respectability for its foundation—glittering, only to burst with the more certainty.

It would be altogether superfluous to insist upon the study of Anatomy, in the pursuit of Surgical knowledge, did not the term appear to be so erroneously applied. To be an expert operator, appears to be the

full extent to which Anatomical knowledge is required. No opinion has contributed so much to debase the Science. Mankind are too apt to bestow applause and commendation upon actions, which may tend to elevate their own discrimination above the ordinary rank of intellect, and it often happens that successful operations have established reputation, which could not be sustained by sound learning or judgment. To be an operator, is sufficient to secure confidence, both in Medical and Surgical Science. What constitutes a Surgeon? He only is entitled to the appellation, who views the whole system, as composed of a vast variety of materials, differing in their relations and sympathies, and who knows and feels the value and power of nature—the numerous remedies she proposes, and the various resources she possesses. But such knowledge is not apt to increase reputation—it must be tangible to common minds, or it can give no celebrity. Were Medical men the sole judges, elevation of character would be productive of different and better results. It is for these reasons, that Medical Surgery does not rank with operative. Now the operator knows that he will acquire more solid and permanent advantage, by amputating a limb in a minute, than by saving it in a week—he therefore looks to the sharpness of his knife, and not to an examination of the disease for increase of his fame. How much is minute Anatomy neglected by this legalized butcher, who despises every little artery and vein, as though they did not belong to the system. I grant, that their physiological bearing may not be very important, but they must not be undervalued in their pathological relation or condition. Do not these vessels often become enlarged to such an extent, that they very unexpectedly embarrass the operator? Do they not re-establish obliterated circulations, and become the primary con-

ductors of the blood? Has not an unexpected, or unusual passage of a small nerve, even in the simple operation of bleeding, been productive of the most deleterious consequences—and has not even death ensued from wounding it? We hear the Fascia decried as the mere trick of the dissector—but if these despised envelopes were studied in relation to the organs they cover, we should not so frequently hear of the many accidents which disgrace Surgery. It is true, the veriest empiric may perform the operation for Hernia, or successfully extract a stone, yet success is no evidence of knowledge, for the constitution may possess sufficient resisting power, to repair almost any injury. It is the dazzle of operations that destroys many young men—for their first essay may be in minor branches, and here a failure is ruin. The constitution appears to be overlooked, without a perfect knowledge of which, Surgery becomes merely mechanical, and unworthy of the name of Science. What is so well calculated to give lustre to it, as a perfect knowledge of Topographical Anatomy? It is useless to press the enquiry.

Such, Gentlemen, are the views which practical Anatomy presents. It must be apparent, that they are of the greatest importance, and it is equally evident, that the knowledge of such an extended subject, cannot be attained without great labor and difficulty. It is however, a subject which holds out the purest intellectual delight, in the contemplation of an organization, the most wonderful and complex. How superior to the inventions of man, in all the elaborate machinery, and yet how little is it valued! In the one we see matter moving from external impulses—in the other—a structure endowed with a self-sustaining power! Were all of our organs spread before us—were their hidden springs unfolded, and their impulses

known—how little would there be to admire in the works of our own hands. But there is, fortunately, but a partial revelation, which harmonizes with all nature, and it is well for us, perhaps, that no more is disclosed—for it stimulates us to further exertions, by the hope of more enlarged views of a Science, now so dimly shadowed out to us. Our expectations of usefulness, should urge us to spend the vigor of our days upon such great investigations, as yet remain to be accomplished—our love of fame, should incite us to a distinction, which must result in the attainment of the most noble objects, that can adorn and elevate the human character.

If we examine the Spirit of the Age, we will find it to be of a practical character—every Science radiates upon the arts. We want no metaphysics to sharpen our speculations. The world is looking for facts, and it will not tolerate abstract enquiries, when the wants of mankind demand practical results. It is an age, when the principles of Bacon impart new life and vigor to education, and make “knowledge—power.” Every thing is in motion, it is living, and nothing can be quickened into life, except it bear the great seal of the times—utility. It is an age of competition—I mean that noblest of all competitions, which acknowledges no supremacy, but that of talent—no legitimacy, but that of knowledge—and no rivalry, but intellectual gladiatorship—which springs from elevated pride, and rests upon the foundation of integrity and truth.

If the attainment of a knowledge of Anatomy, be at all times difficult, how much is that difficulty increased, by the spirit of enquiry which is pervading all departments of education. We shall have severer judges—and that mystery which has so often shrouded and protected the Physician, is fast disappearing before the

sagacity of an enlightened age. How are these difficulties to be overcome? I answer, by enthusiasm, one of the greatest incentives of our nature. It can illumine the darkest labyrinth of human knowledge—it gives capacity its greatest range—it meets with no obstacle, but what it can surmount—and encounters no foe, but what it conquers. It gives a glow to every hope—it adds vigor to every effort—and accomplishes, what we would not have dared even to speculate upon, in the dawn of our labors. What brilliancy does it not impart to genius—not that genius, which, like a torch, blazes to consume itself—but that, which like the sun, enlightens, whilst it discloses the hidden treasures of knowledge. Without this precious gift, Anatomy will be a dead letter, and you will sink into an intellectual torpor, from which nothing can rouse you. Let it then be impressed upon you, that Anatomy is the pole, around which traverse all the Medical Sciences—that to this star we must look, as a guide through the sea of false philosophy, which too often shipwrecks us upon its shoals, and engulphs us in its quicksands. It is, in short, a revolving light, which alone gives lustre, to every planet in its horizon.